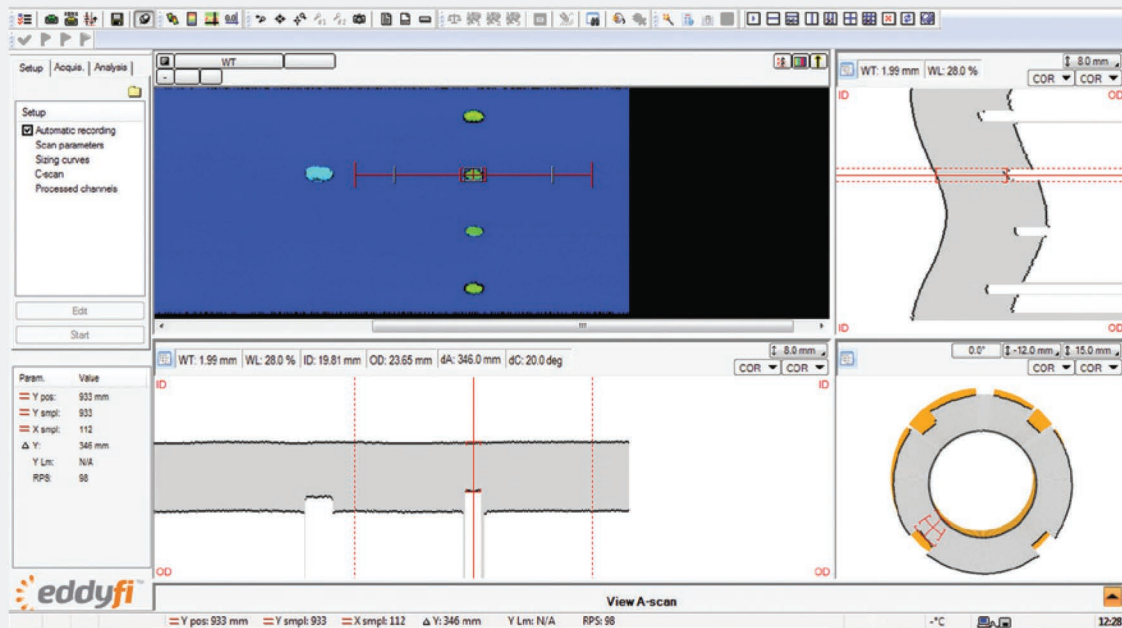
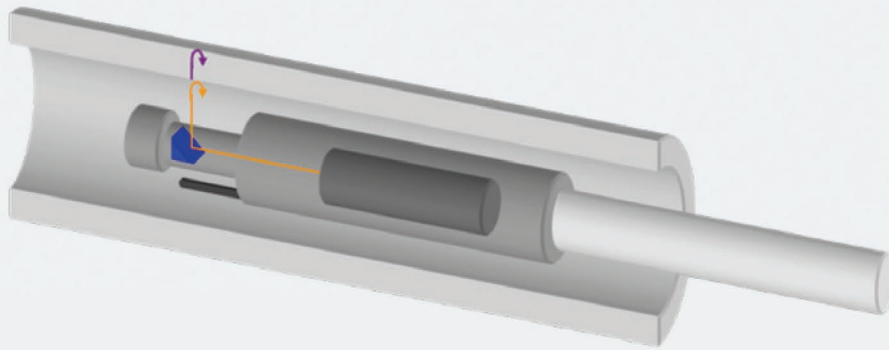


IRIS UT

Internal rotary inspection systems (IRIS) rely on a transducer to generate an ultrasonic pulse oriented parallel to the axis of the tube (flooded with water beforehand). Ultrasound waves are reflected by a mirror and propagate towards the tube's outer wall. They are partially transmitted inside the inner-diameter (ID) wall and reflected by the outer-diameter (OD) wall. Knowing the ultrasonic velocity of the tube's material, we can assess the wall thickness using the time-of-flight difference between the two surfaces. Water circulation rotates the mirror, ensuring that the entire tube is inspected.

IRIS is particularly versatile, as it is suitable for ferrous and non-ferrous materials and allows detecting corrosion, pitting, and thinning on a wide range of tube diameters and wall thicknesses.



IRIS Kit

PART NUMBER	DESCRIPTION
IRIS-KIT-FUL	Complete IRIS kit including (pump and filter unit sold separately); <ul style="list-style-type: none"> • 2 turbines • 4 centering devices • 3 transducers • 4 cables (20 m) • 1 flood tube adapter • 1 repair kit



Transducers and Turbines

Transducers



PART NUMBER	DESCRIPTION
PRBT-IRIS-TD-10M-254	10 MHz transducer, 25.4 mm focal length
PRBT-IRIS-TD-10M-318	10 MHz transducer, 31.8 mm focal length
PRBT-IRIS-TD-10M-381	10 MHz transducer, 38.1 mm focal length
PRBT-IRIS-TD-10M-445	10 MHz transducer, 44.5 mm focal length
PRBT-IRIS-TD-10M-508	10 MHz transducer, 50.8 mm focal length
PRBT-IRIS-TD-15M-254	15 MHz transducer, 25.4 mm focal length
PRBT-IRIS-TD-15M-318	15 MHz transducer, 31.8 mm focal length
PRBT-IRIS-TD-15M-381	15 MHz transducer, 38.1 mm focal length
PRBT-IRIS-TD-15M-445	15 MHz transducer, 44.5 mm focal length
PRBT-IRIS-TD-15M-508	15 MHz transducer, 50.8 mm focal length
PRBT-IRIS-TD-20M-254	20 MHz transducer, 25.4 mm focal length
PRBT-IRIS-TD-20M-318	20 MHz transducer, 31.8 mm focal length
PRBT-IRIS-TD-20M-381	20 MHz transducer, 38.1 mm focal length

Turbines



HIGHLIGHTS

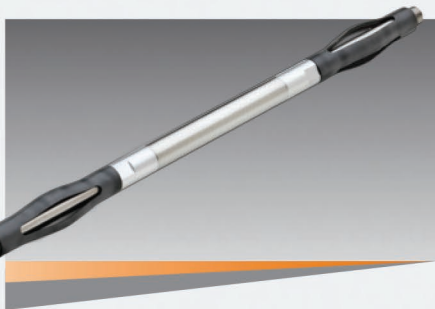
- Unequalled rotation speed
- No trapped air bubbles
- Easy maintenance

Eddyfi's IRIS turbines are engineered to leverage the *Ectane® 2*'s impressive acquisition rate and deliver optimal results for a wide range of rotation speeds, up to 120 revolutions per seconds. The unique mechanical design significantly reduces the formation of bubbles and allows smooth operation for successful ultrasonic examinations. Turbines are available in two sizes: 12 mm (0.472 in) and 17 mm (0.669 in).

PART NUMBER	DESCRIPTION
PRBT-IRIS-TB-120	Diameter 12 mm (0.472 in)
PRBT-IRIS-TB-170	Diameter 17 mm (0.669 in)

Centering Devices and Cables

Tulip Centering Devices



HIGHLIGHTS

- Easily adjustable
- No spring sensation
- Good wear resistance
- Easy maintenance

The polymer centering tulip design ensures ease of sliding and maximum durability in a compact size. Each centering tulip is screwed in the main rod, which prevents back-and-forth spring sensation (snap-back). This design is available in extra-small size covering tube IDs ranging from 11.4 mm to 18 mm (0.45 in to 0.71 in).

Spring-Loaded Arm Centering Devices



HIGHLIGHTS

- Linked arms for better centering
- Self-contained
- Fast and simple assembly
- Easy maintenance

These centering devices have two sets of spring-loaded arms linked in both directions to ensure perfect centering with three contact points. The centering device is made to be self-contained and removable from the shaft without loss of components or pressure in the arms. This design is available in four sizes — extra-small, small, medium, large — covering tube IDs ranging from 11.4 mm to 76.2 mm (0.45 in to 3.0 in). The large centering device comes with a flexible shaft for bent tube inspection.

PART NUMBER	DESCRIPTION
PRBT-IRIS-CDXS	Extra-small centering device (11.4–18.0 mm)
PRBT-IRIS-CDSM-SLA	Small centering device with spring-loaded arms (18.0–25.4 mm)
PRBT-IRIS-CDMD	Medium centering device with spring-loaded arms (23.0–42.0 mm)
PRBT-IRIS-CDLG	Large centering device with spring-loaded arms (38.1–76.2 mm)

Cables

PART NUMBER	DESCRIPTION
PRBT-IRIS-CBL-N15	Nylon cable, diameter 7.9 mm (0.313 in), 15 m long
PRBT-IRIS-CBL-N20	Nylon cable, diameter 7.9 mm (0.313 in), 20 m long

PART NUMBER	DESCRIPTION
PRBT-IRIS-CBL-N30	Nylon cable, diameter 7.9 mm (0.313 in), 30 m long
PRBT-IRIS-CBL-BNC	BNC cable, 3 m long